

TO Air Quality Permit File: TVOP-63-00016
Allegheny Energy Supply Company, LLC/Mitchell Power Station

FROM Martin L. Hochhauser, P.E. *M. L. H., P.E.*
Air Quality Eng. Specialist
Air Quality Program

THROUGH Barbara R. Hatch, P.E. *B. R. H.* Mark Wayner, P.E. *M. Wayner*
Environmental Engineering Manager
Environmental Program Manager
Air Quality Program

DATE May 24, 2012

RE Review of Application for Title V Operating Permit
Allegheny Energy Supply Company, LLC/Mitchell Power Station
Union Township, Washington County

APS#595996; AUTH #649698; PF#557833

Background:

The Allegheny Energy Supply Company, LLC operates an electrical generation facility known as the Mitchell Power Station, located in Union Township, Washington County. The main sources at this facility are one (1) pulverized coal (PC) fired boiler (Source ID 034), with a maximum fuel heat input of 2,988 MMBtu/hour, which powers a 299-MW electrical generator and three (3) oil fired boilers, Units 1, 2, and 3 (Source IDs 031, 032, and 033), each with maximum fuel heat input of 841 MMBtu/hour, which have a combined steam output and supply a single 75-MW electrical generator. Emissions from the PC boiler are controlled by low NO_x burners, two (2) electrostatic precipitators (ESP) arranged in series, followed by a lime reagent based wet flue gas desulfurization system. The oil fired boilers have no particulate control and restrict SO₂ emissions using a limitation of 0.5% sulfur by weight in the #2 fuel oil combusted.

Supporting equipment at this site includes two auxiliary boilers (rated at 27 MMBtu/hr fuel heat input capacity), one 850-bhp emergency diesel generator engine, one 266-bhp emergency firewater pump engine, coal handling equipment, three lime storage silos, No. 2 fuel oil storage tanks, 23 kerosene fired space heaters, a barge unloading system, lime vacuum conveying system, and waste water treatment system. Dust emissions from barge unloading, the storage silos, and the lime vacuum conveying system are controlled by fabric filter collectors.

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On March 6, 2000, plan approval 63-00016A was issued for upgrade of the lime material handling system at the Mitchell Power Station to eliminate fugitive dust problems. Previously, quicklime was unloaded from barges moored at the river dock at the station with a clamshell crane bucket and sent by conveyor to the lime storage silos. This system was replaced by a pneumatic barge unloading and conveying material handling system. Fabric filter collectors were also added to the storage silos. This enables the barge to be kept partially covered during unloading and provides transfer through a vacuum conveying system to lime roll crusher and then to the silos. The single existing belt conveyor that remains in the system had vacuum hoods added to its loading and unloading locations. The changes prevent fugitive emissions from material drops, exposure to air currents, and also filter the conveying air.

On March 26, 2002, an initial Title V Operating Permit was issued for the Mitchell Power Station, operated by the Allegheny Energy Supply Company. This Operating Permit had an expiration date of March 26, 2007 and was identified as TVOP-63-00016. The Department amended this permit on September 5, 2002 to remove requirements of a terminated Consent Decree and to clarify some reporting requirements.

The Department again amended this permit on February 24, 2004 to incorporate the requirements of plan approval PA-63-00016B (low NO_x burner system on Boiler 33 (Source ID 034). Also, the Operating Permit was amended on July 13, 2004 to clarify authorization to burn small volumes, less than 10,000 gallons annually, of waste oil.

This permit was again amended on September 7, 2006 to remove the particulate stack test requirement for the three oil-fired boilers (Source IDs 031, 032, and 033). This allowed particulate emissions for these boilers to be determined by estimation techniques other than stack testing of the individual boilers. The basis of this change was the very low operational utilization of these three EGUs.

Finally, two portable evaporative coolers were installed at the station on June 19, 2007. This caused a de minimis emission increase of 0.0027 tons per year of PM₁₀ from the facility. The increase was announced in the PA Bulletin on August 4, 2007.

The Department received a Title V permit renewal application for the Mitchell Power Station on September 27, 2006. The Department sent a clerical completeness letter to Allegheny Energy on October 5, 2006, and an administrative completeness letter on November 20, 2006. This document is a review of that application.

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⁵ Emission estimates for the Emergency Diesel Generator are based on an annual 500 hour restriction on operation, AP-42, and use of 0.5% sulfur fuel.

⁶ Emission estimates for the Facility Fugitive Dust Emissions are based on AP-42.

⁷ Emission estimates for the Waste Water Treatment System are based on the fact that the contaminants treated are flyash and lime or calcium salts, none of which are organic.

⁸ Emission estimates for the lime silos, lime roll crusher, barge un-loader and vacuum conveying system are based on AP-42.

⁹ The Diesel Emergency Firewater Pump Engine has no limit on operating time during emergency operation.

The coal-fired boiler at the Mitchell Station is also a source of lead emissions, another criteria air pollutant. Emissions of lead from the coal-fired boiler are 0.055 pounds per hour and 0.24 tons per year. Each B & W Oil Unit has lead emissions of 0.0092 pounds per hour and 0.04 tons per year. Lead emissions from the facility are 0.082 pounds per hour and 0.36 tons per year.

Emissions of HAPs from the sources at the Mitchell Power Station are estimated to be the following:

Table 2
Allegheny Energy - Mitchell Power Station (TVOP-63-00016)
Facility HAP Emissions

Hazardous Air Pollutant (HAP)	Coal-fired Boiler Source ID 034		Each B&W Oil-fired Boiler, Source ID 031, 032, & 033		Facility Total	
	Lb/Hr	Ton/Yr	Lb/Hr	Ton/Yr	Lb/Hr	Ton/Yr
Antimony	0.002	0.01	0.0320	0.14	0.098	0.43
Arsenic	0.053	0.23	0.0081	0.04	0.077	0.34
Beryllium	0.003	0.01	0.0002	0.00	0.003	0.01
Cadmium	0.007	0.03	0.0024	0.01	0.014	0.06
Chromium	0.034	0.15	0.0052	0.02	0.049	0.22
Cobalt Compounds	0.013	0.06	0.0367	0.16	0.123	0.54
Manganese	0.064	0.28	0.0183	0.08	0.119	0.52
Mercury	0.011	0.05	0.0007	0.00	0.013	0.06
Nickel	0.036	0.16	0.5154	2.26	1.582	6.93
Selenium	0.169	0.74	0.0042	0.02	0.181	0.79
Benzene	0.169	0.74	0.0013	0.01	0.173	0.76
Formaldehyde	0.031	0.14	0.2013	0.88	0.635	2.78
Hexane	0.009	0.04	0.0000	0.00	0.009	0.04
Hydrochloric Acid	6.314	27.65	0.0000	0.00	6.314	27.65
Hydrogen Fluoride	1.285	5.63	0.0000	0.00	1.285	5.63
Naphthalene	0.002	0.01	0.0069	0.03	0.022	0.10
Toluene	0.031	0.14	0.0378	0.17	0.145	0.63
Total	8.23	36.04	0.84	3.67	10.74	47.06

HAP emissions are based on AP-42 emission factors.

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I. Deminimis Emission Increases

Two changes to the facility have caused emission increases of deminimis amounts since the issuance of the previous Operating Permit. Change 1 took place on July 13, 2004 and Change 2 took place on June 19, 2007. The total of these deminimis increases is shown in Table 4:

Table 4
Allegheny Energy - Mitchell Power Station (TVOP-63-00016)
Deminimis Emission Increases

Change	Pollutant									
	PM10		SO2		CO		NOx		VOC	
	Lb/Hr	Ton/Yr	Lb/Hr	Ton/Yr	Lb/Hr	Ton/Yr	Lb/Hr	Ton/Yr	Lb/Hr	Ton/Yr
1. Combustion of Waste Oil	0.0026	0.0115	0.1050	0.46	0.0018	0.0077	0.0234	0.1027	0.0003	0.0012
2. Installation of Two Evaporative Coolers	0.0006	0.0027								
Total Emission Increase	0.0032	0.0142	0.1050	0.46	0.0018	0.0077	0.0234	0.1027	0.0003	0.0012

The emission increases due to these changes are compliant with the deminimis increases allowed by the operating permit.

II. Additional Requirement for Testing

For the initial Title V permit issuance (circa, 2002) periodic monitoring for compliance with the particulate emission standards of 0.1 pounds per MMBtu established at Pa Code Title 25 § 123.11(a)(3) was typically accomplished through stack testing at least once during the term of permit (every five years). In accordance with the final report issued by DEP on December 22, 2010 entitled "Evaluation of Total Particulate Matter Emissions From Coal-Fired Electric Generation Units," the Department now requires stack testing to demonstrate compliance with the allowable particulate rate from coal-fired EGU boilers to be conducted at least every two years. This requirement has been added to the proposed Operating Permit, along with standardized EGU testing language. Testing for compliance of particulate emissions from the Coal Fired Unit (Source ID 034) is still accomplished by EPA Method 5.

With the promulgation of a PM_{2.5} standard, and the development of a refined test method (OTM-028) for fine particulate, the Department wanted information regarding PM_{2.5} emissions from the largest sources of PM_{2.5}; coal-fired and waste coal-fired electric generating units (EGUs). On January 30, 2009, the owners/operators of 34 coal-fired electric generating units

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construction or modification after August 17, 1971 and prior to December 23, 1976. There are four fossil-fuel-fired steam generators at the Mitchell Power Station with a heat input capacity greater than 250 MMBtu per hour, three oil-fired boilers Source IDs 031, 032, and 033, each with a heat input capacity of 841 MMBtu/hour, and also one coal-fired boiler with a heat input capacity of 2,988 MMBtu per hour. However, these three oil-fired boilers were constructed during 1948 and 1949. The coal-fired boiler began operation during 1963. These four boilers have not been modified, under the NSPS definition in 40 CFR §60.2, since installation. None of these four boilers were constructed or modified within the meaning of the NSPS, during the period necessary to be subject to 40 CFR Part 60, Subpart D. Therefore, no boiler at the Mitchell Power Station is subject to the requirements of 40 CFR Part 60, Subpart D.

b. 40 CFR Part 60 Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. - This subpart applies to any fossil-fuel-fired steam generating unit that has a maximum heat input capacity of more than 100 MMBtu per hour, less than 250 MMBtu per hour, and last commenced construction or modification after June 19, 1984, or oil fired oil-fired units with a heat input capacity greater than 250 MMBtu per hour and subject to Subpart D. Mitchell Power Station has no boilers with a maximum heat input capacity of more than 100 MMBtu per hour and less than 250 MMBtu per hour. While the plant has three oil-fired boilers with a heat input capacity greater than 250 MMBtu per hour, these boilers are not subject to Subpart D. Accordingly, no boiler at the Mitchell Power Station is subject to the requirements of 40 CFR Part 60, Subpart Db.

c. 40 CFR Part 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. - Subpart Dc is applicable to facilities with steam generating units constructed after June 9, 1989 with a minimum heat input capacity of 10 MMBTU/hour, and a maximum heat input capacity of 100 MMBTU/hour. The two auxiliary boilers at the Mitchell Power Station have a maximum heat input capacity of 27 MMBTU/hour, each. However, the two auxiliary boilers were installed prior to June 9, 1989. Accordingly, no boiler at the Mitchell Power Station is subject to the requirements of 40 CFR Part 60, Subpart Db.

d. 40 CFR Part 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. The fuel oil storage tanks at the Mitchell Power Station were constructed prior to July 23, 1984. Therefore, no storage vessel at the Mitchell Power Station is subject to the requirements of 40 CFR Part 60, Subpart Kb.

e. 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. - The emergency generator is powered by an 850-bhp diesel engine which is a stationary compression ignition internal combustion engine. Also, the emergency firewater pump is powered by a 266-bhp diesel engine. For

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readings of a non-resettable hour meter on the engine to verify periods and type of operation, was also added to the Operating Permit.

For the Diesel Emergency Firewater Pump Engine, paragraph §63.6590(a)(1)(ii) states that existing stationary RICE with a site rating of equal to or less than 500-bhp must meet the requirements of Subpart ZZZZ. Compliance with these requirements must take place no later than May 3, 2013. Table 2c to the subpart provides operational and maintenance (O&M) requirements for this engine. §63.6625 (e), (f), (h), and (i) also contain applicable O&M requirements, as well as the requirements to equip the engine with a non-resettable hour meter. Table 6 to the subpart provides work practice requirements for this engine.

c. 40 CFR Part 63 Subpart DDDDD - National Emission Standards for Industrial, Commercial, Institutional (ICI) Boilers and Process Heaters. - There are 15 subcategories included in DDDDD. The final rule includes specific requirements for each subcategory. Applicable requirements are based on the age, size, and fuel used in each source. It applies to new, reconstructed and existing coal, oil, biomass (i.e., wood products), natural gas, refinery gas boilers and process heaters. For all new and existing natural gas- and refinery gas-fired units, the final rule establishes a work practice standard, instead of numeric emission limits. The operator will be required to perform an annual tune-up for each unit. Units combusting other gases can qualify for work practice standards by demonstrating that they burn “clean fuel,” with contaminant levels similar to natural gas. For all new and existing units with a heat input capacity less than 10 million British thermal units per hour (MMBtu/hr), the final rule establishes a work practice standard instead of numeric emission limits. The operator will be required to perform a tune-up for each unit once every 2 years. The final rule establishes a work practice standard instead of numeric emission limits for all new and existing “limited use” boilers. The operator will be required to perform a tune-up for each unit once every 2 years.

The final rule establishes numeric emission limits for all other existing and new ICI boilers and process heaters located at major sources (including those that burn coal and biomass). The final rule establishes emission limits for mercury, dioxin, particulate matter (PM) (as a surrogate for non-mercury metals), hydrogen chloride (HCl) (as a surrogate for acid gases), and carbon monoxide (CO) (as a surrogate for non-dioxin organic air toxics). The final rule requires monitoring to ensure compliance with emission limits. The largest major source boilers must continuously monitor their particulate emissions as a surrogate for metals such as lead and chromium. All units larger than 10 MMBtu/hr must monitor oxygen as a measure of good combustion. The final rule also requires monitoring to ensure the boiler and pollution controls are operating within appropriate parameters. Existing major source facilities are required to conduct a one-time energy assessment to identify cost-effective energy conservation measures. All units must meet notification, reporting and recordkeeping requirements.

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control device; and have pre-control emissions that are equal to or greater than the major source threshold.

The coal-fired unit has major source levels of emission for particulate matter and SO₂ and uses add-on control devices to achieve compliance with these limits. This source has CEMS for SO₂. Emissions of PM₁₀ from the coal-fired boiler are controlled by two ESPs in series; The FGD system also provides some co-benefit control of PM emissions. In addition, PM₁₀ from the coal-fired boiler is not directly measured. This means the coal-fired boiler is subject to CAM for the pollutant PM₁₀ and a CAM Plan must be submitted for the facility.

In the CAM Plan for the coal-fired EGU, the company has proposed to monitor the secondary voltage and current in each field of the electrostatic precipitators (ESPs) to determine total input power to the ESP fields and the internal flow rate of scrubber liquid in the FGD system as CAM. This CAM Plan was added as a condition for coal-fired unit in the proposed Operating Permit.

b. Best Available Retrofit Technology (BART)

The Regional Haze regulation in 40 CFR 51.308(e) required state implementation plans (SIPs) to contain emission limits representing Best Available Retrofit Technology (BART) for certain facilities that may reasonably be anticipated to cause or contribute to visibility impairment at a Class I area. The BART requirements apply to units that collectively have the potential to emit 250 tons per year of one or more of a visibility-impairing pollutant and were in existence on August 7, 1977, but were not in operation before August 7, 1962. Visibility impairing pollutants include NO_x, SO₂, PM₁₀, and PM_{2.5}. VOC and NH₃ may be visibility-impairing pollutants; however the Department determined that modeling tools to assess the visibility impacts from VOC and NH₃ adequately are not available at the time of analysis. The BART requirements only apply to facilities in 26 specific categories listed in the Clean Air Act.

The Department completed an analysis of BART requirements for the Mitchell Power Station on January 17, 2008, based on the Department's SIP revision submittal to EPA. This analysis determined that the requirements of BART are applicable to the coal-fired boiler (Source ID 034) at the Mitchell Power Station. EPA had determined that BART requirements for EGUs (Electric Generating Units) covered by CAIR are satisfied by the CAIR requirements for NO_x and SO_x so an engineering analysis was not required for these pollutants. For Pennsylvania EGUs, the only pollutant requiring an engineering analysis was filterable PM₁₀.

The facility provided cost analysis data for a variety of filterable particulate matter control technologies. The retrofit technologies reviewed included fuel-related modifications, ESP upgrades, enhancements or replacement, replacement of the ESPs with fabric filters or compact hybrid particulate collectors (COHPAC). Of the technologies reviewed, COHPAC provided the

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of 25 Pa Code Subchapter D, Sections §§145.201-145.223 and 40 CFR Part 97 Federal NO_x Budget Trading Program and CAIR NO_x and SO₂ Trading Program are still incorporated into the Title V Operating Permit.

Due to the applicability of 25 Pa Code Sections §§145.201-145.233, Subchapter D for “PA CAIR”, the NO_x allowance requirements 25 Pa Code Sections §§123.101-123.121 and The NO_x Budget Trading Program in 25 Pa Code Sections §§ 145.1- 145.100 Subchapter A have been removed from the Title V operating permit.

d. **40 CFR Part 98, Mandatory Greenhouse Gas Reporting** - This part was promulgated on October 30, 2009. Per 40 CFR Section 98.2(a), the Greenhouse Gas (GHG) reporting requirements and related monitoring, recordkeeping, and reporting requirements of this part apply to the owners and operators of any facility that is located in the United States and that meets the requirements of either paragraph (a)(1), (a)(2), or (a)(3) of this section. Electricity generation units that are subject to the Acid Rain Program are also subject to this part under (a)(1) of this section. Units at the Mitchell Power Station are subject to the Acid Rain Program and the facility is therefore subject to this part. Therefore, the station is subject to 40 CFR Part 98 Subpart C for the calendar year 2010 and later years. This makes the station subject to the specific requirements of Subpart D-Electricity Generation of Part 98.

However, public comments to the Greenhouse Gas Mandatory Reporting Rule (GHG MRR) questioned the requirements of this rule to meet current definitions of “applicable requirement” at 40 CFR 70.2 and 71.2. The commentators requested that USEPA confirm their interpretation of the regulations. The EPA provided the following response: “As currently written, the definition of “applicable requirement” in 40 CFR 70.2 and 71.2 does not include a monitoring rule such as today’s action, which is promulgated under CAA sections 114(a)(1) and 208.” The preamble of the final version of the GHG MRR, located at 74 Fed Reg 209, pp. 56287-56288, states that the GHG MRR is not considered an “applicable requirement” under the Title V Operating Permit program. Therefore, this Subpart, while an obligation for the Mitchell Power Station, is not considered an applicable condition for this Title V Operating Permit.

The Greenhouse Gas Tailoring Rule was issued in May 2010. This rule establishes a process for conducting Prevention of Significant Deterioration (PSD) reviews, including Best Available Control Technology (BACT) determinations for control of greenhouse gases (GHG) when a new source or a modification to an existing source results in emissions of GHGs in excess of certain thresholds. Since May, 2010, there have not been any modifications to the Mitchell facility that triggered a GHG PSD review.

IV. Pennsylvania Air Pollution Control Regulations

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Units 0.662 pounds SO₂ per MMBtu. The FGD system reduces SO₂ to below this emission rate and compliance is verified by the SO₂ CEM. The use of fuel oil containing no more than 0.5% sulfur ensures that the oil-fired EGUs operate in compliance with this rule.

g. **25 Pa Code 123.25 (Monitoring Requirements)** – The requirements of this section apply to the coal-fired boiler at the Mitchell Station.

h. **25 Pa Code 123.31 (Odor Emissions)** – The facility is subject to this regulation and daily inspections demonstrate compliance.

i. **25 Pa Code 123.41 (Limitations — Visible Emissions)** – The facility is subject to this regulation and daily inspections demonstrate compliance.

j. **25 Pa Code 123.42 (Exceptions — Visible Emissions)** - These exceptions are applicable to the limitations in paragraph 123.41 and the opacity limitation established under §123.41.

k. **25 Pa Code Chapter 127.441 (Operating permit terms and conditions)** – Operators of the Mitchell Power Station will fulfill the following requirements:

A. The permittee shall maintain comprehensive, accurate records which, at a minimum, shall include:

- a. The number of hours per month that each piece of equipment operated.
- b. The amount of fuel used per month in each piece of equipment.

B. The owner/operator shall keep daily records of all product delivery. These records shall be kept on site for a period of five years and be made available to the Department upon request.

l. **25 Pa Code Chapter 129.14 (Open Burning Operations)** – The Mitchell Power Station is located in the Monongahela Valley air basin. This section prohibits open burning in air basins with specific exceptions.

V. Previous Operating Permit

Emission limitations and other conditions from the previous Operating Permit were carried forward into this operating permit with some deletions, changes and additions. Any requirements for NO_x trading have been deleted and replaced by requirements for Pennsylvania specific CAIR. The applicability of specific MACT standards that have become effective since the issuance of the previous TVOP has been evaluated and the applicable requirements included in the proposed operating permit.

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Conclusions and Recommendations:

Allegheny Energy Supply Company, LLC has proposed in this application to operate a coal-fired boiler and fuel oil-fired boiler powered electrical power plant in Union Township, Washington County. I recommend the issuance of an Operating Permit for this application.

Permit Authorized by this Authorization			
Quantity	Facility Name		PF ID: 557833
1	Allegheny Energy Supply Company, LLC/Mitchell Power Station (OP-63-00016)		
		APS ID: 595996	Auth. ID: 649698
Short Descr.	Electric Power Plant with 1-Coal-Fired (288-MW Net Electrical Output), and 3-Oil Fired Boilers (82-MW Net Electrical Output for the total of all 3 boilers.)		
Permits Inactivated by this Authorization			
Permit #			



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION
SOUTHWEST REGIONAL OFFICE

42-079-00014

November 30, 2012

CERTIFIED MAIL: 7000 1670 0004 1442 9069

James A. Lefik, Environmental Engineer
Allegheny Energy Supply Company, LLC
Environmental Permitting & Reporting
800 Cabin Hill Drive
Greensburg, PA 15601

Re: Final Title V Operating Permit
TVOP-63-00016
Final Phase II Acid Rain Permit
AR-63-00016
Mitchell Station
Union Twp, Washington County

RECEIVED

DEC 17 2012

3AP20

Dear Mr. Lefik:

Enclosed please find the Title V Operating Permit and the Phase II Acid Rain Permit for Allegheny Energy Supply Company, LLC, Mitchell Station located in Union Twp, Washington County. This Title V Operating Permit becomes effective on 11/30/2012 and will expire on 11/30/2017. All monitoring, record keeping, and reporting requirements shall begin on this date. The official date of issuance is 11/30/2012. Please include the permit number above with any correspondence to the Department concerning this operating permit.

The Acid Rain Permit becomes effective 1/1/2013 and will expire on 12/31/2017.

Please be advised that any changes in the name, address, phone number, permit contact, responsible official or similar administrative change during the term of the permit requires an administrative operating permit amendment to be filed to revise the operating permit. All administrative amendments require a fee of \$750.00 and must be signed by Responsible Official.

Also, please be advised that the Title V permits may be modified in the future as a result of the resolutions of pending compliance issues.

Condition No. 024 of the General Title V Requirements, Section B of the subject operating permit, requires you to submit the annual compliance certifications to the EPA Administrator as well as to the Department. The appropriate addresses are as follows:

Administrator
Enforcement Programs Section (3AP12)
US EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Regional Air Quality Program Manager
Department of Environmental Protection
Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222

400 Waterfront Drive, Pittsburgh, PA 15222-4745

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
SOUTHWEST REGIONAL OFFICE

December 10, 2012

CERTIFIED MAIL: 7000 1670 0004 1442 9007

James A. Lefik, Environmental Engineer
Allegheny Energy Supply Company, LLC
Environmental Permitting & Reporting
800 Cabin Hill Drive
Greensburg, PA 15601

Re: Final Title V Operating Permit
TVOP-63-00016
Mitchell Station
Union Twp, Washington County

Dear Mr. Lefik:

Enclosed please find the updated Title V Operating Permit for Allegheny Energy Supply Company, LLC, Mitchell Station located in Union Twp, Washington County. This Title V Operating Permit became effective on 11/30/2012 and will expire on 11/30/2017. All monitoring, record keeping, and reporting requirements shall begin on this date. The official date of issuance is 11/30/2012. Please include the permit number above with any correspondence to the Department concerning this operating permit.

Please be advised that any changes in the name, address, phone number, permit contact, responsible official or similar administrative change during the term of the permit requires an administrative operating permit amendment to be filed to revise the operating permit. All administrative amendments require a fee of \$750.00 and must be signed by Responsible Official.

Also, please be advised that the Title V permits may be modified in the future as a result of the resolutions of pending compliance issues.

Condition No. 024 of the General Title V Requirements, Section B of the subject operating permit, requires you to submit the annual compliance certifications to the EPA Administrator as well as to the Department. The appropriate addresses are as follows:

Administrator
Enforcement Programs Section (3AP12)
US EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Regional Air Quality Program Manager
Department of Environmental Protection
Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa.C.S.

400 Waterfront Drive, Pittsburgh, PA 15222-4745

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

AIR POLLUTION CONTROL ACT COMPLIANCE REVIEW FORM

Fully and accurately provide the following information, as specified. Attach additional sheets as necessary.

Type of Compliance Review Form Submittal (check all that apply)

- ☐ Original Filing
☒ Amended Filing

Date of Last Compliance Review Form Filing:
7/10/06

Type of Submittal

- ☐ New Plan Approval
☐ Extension of Plan Approval
☐ Other: _____
- ☐ New Operating Permit
☐ Change of Ownership
- ☒ Renewal of Operating Permit
☐ Periodic Submission (@ 6 mos)

SECTION A. GENERAL APPLICATION INFORMATION

Name of Applicant/Permittee/("applicant")
(non-corporations-attach documentation of legal name)

Allegheny Energy Supply Company, LLC

Address 800 Cabin Hill Drive
Greensburg, PA 15601

Telephone 724-837-3000 Taxpayer ID# 23-3020481

Permit, Plan Approval or Application ID#

Identify the form of management under which the applicant conducts its business (check appropriate box)

- ☐ Individual
☐ Municipality
☐ Proprietorship
☐ Public Corporation
☐ Private Corporation
- ☐ Syndicate
☐ Municipal Authority
☐ Fictitious Name
☐ Partnership
☐ Limited Partnership
- ☐ Government Agency
☐ Joint Venture
☐ Association
☒ Other Type of Business, specify below:
Unregulated Subsidiary of Electric Utility Company

Describe below the type(s) of business activities performed.

Generation of Electricity

List the names and business address of persons with overall management responsibility for the process being permitted (i.e. plant manager).

Name	Business Address
Leo C. Rajter, Vice President, Allegheny Energy Supply Company LLC	800 Cabin Hill Drive, Greensburg, PA 15601

Plan Approvals or Operating Permits. List all plan approvals or operating permits issued by the Department or an approved local air pollution control agency under the APCA to the applicant or related parties that are currently in effect or have been in effect at any time 5 years prior to the date on which this form is notarized. This list shall include the plan approval and operating permit numbers, locations, issuance and expiration dates. Attach additional sheets as necessary.

Air Contamination Source	Plan Approval/ Operating Permit#	Location	Issuance Date	Expiration Date
see attachment #3				

AIR POLLUTION CONTROL ACT COMPLIANCE REVIEW FORM

I, Leo C. Rajter being duly sworn according to the law depose and state, under penalty of law as provided in 18 Pa. C.S. §4944 and Section 9(b)(2) of the Air Pollution Control Act, 35 P.S. §4009(b)(2), that I am the representative of the Applicant/Permittee, identified above, authorized to make this affidavit. I further state that the information provided with this form, after reasonable inquiry, is true and complete to the best of my belief and that there are reasonable procedures in place to insure that documented conduct and deviations are identified and made part of the compliance review information contained in the Compliance Review Form.


Signature

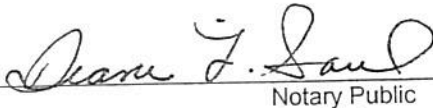
Leo C. Rajter

Name (Print or Type)

Vice President,
Allegheny Energy Supply Company, LLC

Title

Sworn to and subscribed before me this 25th day of Sept., 2001.


Notary Public

COMMONWEALTH OF PENNSYLVANIA

Notarial Seal

Diane L. Saul, Notary Public
City Of Greensburg, Westmoreland County
My Commission Expires May 21, 2009

Member, Pennsylvania Association of Notaries

Affix Corporate Seal and
Attach Copy of Articles of Incorporation
(For Corporations, see Instructions, Instruction 4,
regarding corporate seal and signatures.)

Allegheny Energy, Inc. Subsidiaries (Cont.):

Green Valley Hydro, LLC (Virginia Limited Liability Company)
IRS No. 54-2037786
800 Cabin Hill Drive
Greensburg, PA 15601-1689

Ohio Valley Electric Corporation (12.5% ownership)
3932 U.S. Route 23
Piketon, OH 45661

West Penn Power Company Subsidiaries:

Allegheny Pittsburgh Coal Company (Pennsylvania Corporation)
IRS No. 13-4917755
800 Cabin Hill Drive
Greensburg, PA 15601

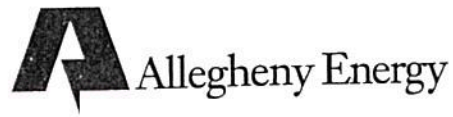
West Virginia Power and Transmission Company (West Virginia Corporation)
IRS No. 25-1634464
800 Cabin Hill Drive
Greensburg, PA 15601

West Penn Transferring Agent, LLC (Pennsylvania Limited Liability Company)
IRS No. 23-3020480
800 Cabin Hill Drive
Greensburg, PA 15601-1689

West Penn Funding Corporation (Delaware Corporation)
IRS No. 52-2196982
2285A Renaissance Drive
Suite 18
Las Vegas, NV 89119

4. Plan Approvals and Operating Permits

Location	Source	Plan Approval or Permit Number	Issue Date	Expiration Date
Mitchell Power Station	Power Station	Operating Permit #63-000-016	06/18/1997	06/18/2002
	Power Station	NOx Allowance Operating Permit #63-0016	02/09/2001	02/09/2006
	Boiler #33	PA-63-0001613	02/18/2004	Incorporated into Title V permit
	Power Station	Title V OP #63-00016	03/26/2002	03/26/2007
Armstrong Power Station	Units #1 & 2	Operating Permit #03-000-023	06/10/1996	06/10/2001
	Power Station	NOx Allowance Operating Permit #03-000-023	02/09/2001	02/09/2006
	Units #1 & 2	PA-03-00023A	10/24/2005	Incorporated into Title V permit
	Power Station	Title V #03-00023	07/31/2001	07/31/2006
Hatfield's Ferry Power Station	Unit 3	Operating Permit #30-306-004	04/02/1996	04/02/2001
	Unit 1	Operating Permit #30-306-003	10/12/1995	10/12/2000
	Unit 2	Operating Permit #30-306-002	01/04/1996	10/12/2000
	Power Station	NOx Allowance Operating Permit #30-000-099	02/09/2001	02/09/2006
	Power Station	Title V #30-00099	11/29/2001	11/29/2006
	Units #1, 2 & 3/ROFA	PA-30-00099A	04/22/2002	01/17/2007 - ext
	Units #1, 2 & 3/Synfuel	PA-30-00099B	06/17/2005	12/17/2006 - ext
	Units #1, 2 & 3/PRB/Dust Suppression	PA-30-00099C	07/01/05	Incorporated into Title V permit
	Units #1, 2 & 3/PRB/SO3 Inj	PA-30-00099D	09/28/2005	11/13/2006 - ext
	Units #1, 2 & 3/PRB	PA-30-00099E	12/14/2005	10/13/2006 - ext
Allegheny Energy Unit 1 and Unit 2	Two natural gas-fired combustion turbines	ACHD # 02-0055 (installation)	04/28/2000	N/A
		ACHD Title V Permit # 0580	12/16/2004	12/15/2009
Allegheny Energy Units 3, 4 and 5	Two (gas-fired) on one combined cycle combustion turbines	ACHD # 0580-1002 (installation)	07/12/2001	N/A
		ACHD Title V Permit # 0580	12/16/2004	12/15/2009
Allegheny Energy Unit 8 and Unit 9	Two natural gas-fired combustion turbines	Plan Approval PA-26-495A Title V #26-00495	07/06/2006 01/28/2005	12/31/2001 01/27/2010
Allegheny Energy Unit 12 and Unit 13	Two natural gas-fired combustion turbines	Plan Approval PA-28-05028 Title V # 28-05028	06/26/2001 05/19/2003	11/03/2008 05/31/2008
Hunlock Creek Unit 4	One natural gas-fired combustion turbine	Plan Approval PA-40-328-003 Title V # 40-00005	05/05/2000 10/31/2005	06/30/2001 10/31/2010



Environment, Health & Safety

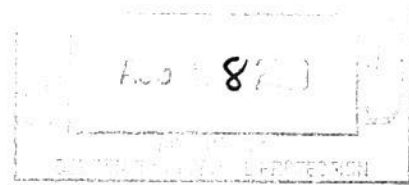
800 Cabin Hill Drive
Greensburg, PA 15601

CERTIFIED MAIL

August 27, 2009

TSR/A
~~Ms. Barbara R. Hatch, P.E.~~
Environmental Engineer Manager, Air Quality
Pennsylvania Department of Environmental Protection
400 Waterfront Drive
Pittsburgh, PA 15222-4745

RE: Allegheny Energy Supply Co., LLC
Mitchell Power Station
Particulate Matter Stack Test Results



Dear Ms. Hatch:

Enclosed please find a copy of the stack test results for total particulate matter conducted at Allegheny Energy's Mitchell Power Station on June 29, 2009, in accordance with your letter dated January 22, 2009.

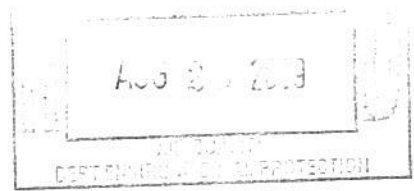
If you have any questions or require additional information please contact me at (724) 838-6136 or by email at jlefik@alleghenyenergy.com.

Sincerely,

James A. Lefik
James A. Lefik
Environmental Engineer

Enclosure

c: Mr. Greg Parrish - PaDEP, Harrisburg (2 copies of enclosure)



**UNIT 3 – STACK 33
TOTAL PARTICULATE MATTER TESTING REPORT
MITCHELL POWER STATION
ALLEGHENY ENERGY SUPPLY COMPANY, LLC
NEW EAGLE, PENNSYLVANIA**

Testing Date: June 29, 2009

Prepared for:

Allegheny Energy Inc.
800 Cabin Hill Drive
Greensburg, Pennsylvania 15601

Prepared by:

Air/Compliance Consultants, Inc.
1050 William Pitt Way
Pittsburgh, Pennsylvania 15238
412-826-3636

PA Lab Registration: #02-742

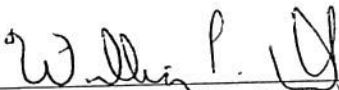
Project Number 07-113J

SOURCE TEST REPORT STATEMENT

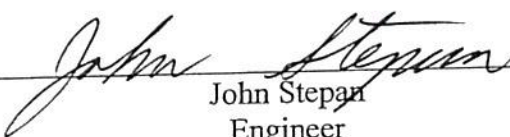
This statement signed by the on-site supervisor of the test team and the source owner/operator certifies that "to the best of their knowledge" the source test report has been checked for completeness, and that the results presented are accurate, error-free, legible, and representative of the actual emissions measured during testing.

**UNIT 3 – STACK 33
TOTAL PARTICULATE MATTER TESTING REPORT
MITCHELL POWER STATION
ALLEGHENY ENERGY SUPPLY COMPANY, LLC
NEW EAGLE, PENNSYLVANIA**

Testing Date: June 29, 2009



William P. Cowell
Senior Engineer, QSTI
Air/Compliance Consultants, Inc.
On-Site Supervisor of the Test Team



John Stepan
Engineer
Environmental Performance and Compliance
Allegheny Energy Service Corporation as an agent for
Allegheny Energy Supply Company, LLC
On-Site Technical Representative

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TABLES

1. Particulate Matter Test Results, Boiler 33, Methods 5 and OTM-28

APPENDICES

- A. Testing Protocol and Agency Correspondence
- B. Company Supplied Process Data
- C. Computerized and Field Data Sheets
- D. CEM Bias and Drift Sheets
- E. Laboratory Data
- F. F-Factor Calculation and Coal Analysis Report
- G. Equipment Calibrations, Gas Cylinder Certifications and QSTI Certifications
- H. Sample Calculations

UNIT 3 – STACK 33
TOTAL PARTICULATE MATTER TESTING REPORT
MITCHELL POWER STATION
ALLEGHENY ENERGY SUPPLY COMPANY, LLC
NEW EAGLE, PENNSYLVANIA

1 TEST RESULTS SUMMARY

Title V Operating Permit 63-00016			
Source Name: Stack 33		Source ID: Unit 3	
Pollutant	Average Result	Limit	Compliant / Non-compliant
Particulate Matter	0.0260 lb/MMBtu	0.100 lb/MMBtu	Compliant

2 INTRODUCTION

Air/Compliance Consultants, Inc. (ACCI) was contracted by Allegheny Energy Supply Company, LLC (AE) to conduct a compliance testing program at the AE Mitchell Power Station located in New Eagle, Pennsylvania. Testing was conducted on Unit 3, Stack 33 at the outlet stack in accordance with Section 4(6) of the Pennsylvania Air Pollution Control Act, 35 P.S. § 4004(6). The stack was tested for filterable particulate matter (FPM) and condensable particulate matter (CPM) as PM_{2.5}. A copy of the test protocol and agency correspondence is located in Appendix A.

3 FIELD PERSONNEL

Compliance testing was conducted on June 29, 2009. ACCI testing personnel consisted of Mr. William Cowell, Senior Engineer, QSTI; Mr. Todd Haas, Scientist, QSTI; and Mr. Michael Belfoure, Scientist. Mr. John Stepan of AE served as the test liaison.

4 PROCESS DESCRIPTION

The Mitchell Power Station operates one coal-fired boiler (Unit 3) which generates electricity for sale and distribution. The boiler is rated for 295 megawatts (MW) and operated at approximately 256 MW during testing. Process rates and data can be found in Appendix B.

5 TESTING METHODS

ACCI conducted testing following the United States Environmental Protection Agency (USEPA) Title 40, Code of Federal Regulations (CFR) Part 60, Appendix A, Testing Methods 1 through 5 and OTM-28 at the stack exhaust location.

5.1. Traverse Point Selection

USEPA Method 1, *Sample and Velocity Traverses for Stationary Sources*, was followed to select sample points across each exhaust stack. USEPA Method 2, *Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)*, was used in conjunction with USEPA Method 3, *Gas Analysis for the Determination of Dry Molecular Weight*, and Method 4, *Determination of Moisture Content in Stack Gases*, to determine the gas velocity and volumetric flow rate at each stack. Each set of velocity determinations included the measurement of gas velocity pressure and gas temperature at each of the USEPA Method 1 traverse points. The velocity pressures were measured with a calibrated Type S Pitot tube. Gas temperature measurements were made using a Type K thermocouple and digital pyrometer. Field data sheets can be found in Appendix C.

5.2. Stack Gas Molecular Weight

USEPA Method 3A, *Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure)*, was utilized for the determination of stack-gas molecular weight. A 1-hour integrated sample was collected and conveyed to a single beam, single wavelength infrared analyzer to determine carbon dioxide (CO₂) and a paramagnetic analyzer to determine oxygen (O₂) concentrations. Nitrogen (N₂) was determined by the difference. Results of the sample measurements can be found in Appendix D.

5.3. Stack Gas Moisture Content

The flue gas moisture content at each testing location was determined in accordance with USEPA Method 4. The gas moisture was determined by quantitatively condensing the water in chilled impingers. The volume of the condensate collected and weight differential in the silica gel determined the amount of moisture condensed. A dry gas meter was used to measure the

volume of gas sampled. The amount of water condensed and the volume of gas sampled was used to calculate the gas moisture content in accordance with USEPA Method 4.

5.4. Total Particulate Matter Determinations

The total particulate emissions consisting of total filterable and condensable particulates were determined in accordance with USEPA Methods 5, *Determination of Particulate Emissions from Stationary Sources*, and OTM-28.

Prior to sampling, all glassware was cleaned with soap and water, rinsed with tap water, deionized water (DI), acetone, and finally methylene chloride (MeCl_2). After cleaning, the glassware was baked at 300°C for at least 6 hours. The glassware was then rinsed with DI, distilled ultra-filtered water conforming to American Society for Testing and Materials (ASTM) D1193-06, Type 1. In addition, reagent blanks (100 milliliters [ml]) were analyzed prior to their use in the field according to Section 9.8 of OTM-28.

The sampling apparatus contained a glass-lined temperature-controlled probe equipped with a Type S Pitot tube and a sharp-edged glass button-hook nozzle. Due to stack conditions, the glass probe liner and nozzle were connected utilizing a glass-coated stainless-steel union. The exit of the probe was connected to a high-efficiency glass-fiber filter supported in a glass filter holder inside an oven heated to $248^\circ\text{F} \pm 25^\circ\text{F}$. The exit of the filter holder was connected to a USEPA Method 23 type condenser, a dropout impinger, a full-sized modified Greenburg-Smith impinger, a Teflon 47 millimeter (mm) filter supported in a glass-filter holder containing a thermocouple. The sample train was then followed with a moisture trap consisting of a modified Greenburg-Smith impinger containing 100 ml of deionized water and an impinger containing a known quantity of silica gel.

Sampling was performed at an isokinetic rate with an isokinetic variation greater than 90% and less than 110%. The sampling train was leak-checked before and after each test run and operated according to the procedures detailed in USEPA Method 5, with the addition of recording the outlet temperature of the CPM filter holder which did not exceed 85°F at any time during

sampling. Each test run was 60 minutes in duration and had a minimum sample volume of 50 dry standard cubic feet (DSCF). Three test runs were performed on the coal-fired boiler.

At the conclusion of sampling, water was present prior to the CPM filter; accordingly, the post-test nitrogen purge procedures in Section 8.5.4 of OTM-28 were performed.

FPM was recovered and analyzed according to USEPA Method 5 procedures. The acetone rinse was evaporated to dryness, desiccated and weighed to a constant weight. The filter was desiccated and weighed to a constant weight. The total filterable particulate catch is the sum of the front-half sample train acetone rinse plus the filter catch.

CPM, aqueous liquid impinger contents, organic rinses, and CPM filter were determined according to the procedures in Section 8.5.4 of OTM-28. Analyses include field reagent blanks of 200 ml acetone, 100 ml H₂O blank, and 100 ml MeCl₂. Additionally, a single field train blank was prepared and analyzed according to Section 9.10 of OTM-28. Laboratory data is located in Appendix E.

6 SAMPLING LOCATION DESCRIPTION

The sampling location for the unit is located at the outlet stack of Boiler 33. The inside diameter (ID) of the exhaust stack at the sampling location is 22'. The nearest upstream disturbance from the port is approximately 125' (5.7 diameters) and the nearest downstream disturbance from the port is approximately 125' (5.7 diameters). A total of 24 traverse points were chosen with 6 points sampled in each of 4 test ports.

7 TESTING RESULTS

Total PM emission results for Stacks 33 are presented in Table 1. PM concentrations are reported in grains per dry standard cubic feet (gr/DSCF) and emissions rates are reported in pounds per hour (lb/hr) and pounds per million British thermal units (lb/MMBtu). Heat inputs in MMBtu/hr are calculated with F-factors derived from as-fired fuel analysis. All three runs are reported in the average for both stacks.

Appendix C contains the computerized and field data sheets. O₂ and CO₂ sample bag averages and bias sheets are contained in Appendix D. Laboratory data is located in Appendix E. F-Factor calculations and the coal analysis report are included in Appendix F. Equipment calibrations, gas cylinder certifications, and Qualified Source Testing Individual (QSTI) certifications are contained in Appendix G. Sample calculations for each USEPA Method and at each testing location are contained in Appendix H.

8 QUALITY ASSURANCE/QUALITY CONTROL

The following field equipment calibrations are also contained in Appendix G:

- Thermocouple
- Nozzle
- Dry Gas Meter and Orifice
- Pitot Tube

9 CONCLUSION

ACCI conducted a testing program on June 29, 2009 at the Allegheny Energy Supply Company, LLC, Mitchell Power Station located in New Eagle, Pennsylvania. Testing was conducted on Unit 3 at the outlet Stack 33 in accordance with Section 4(6) of the Pennsylvania Air Pollution Control Act, 35 P.S. § 4004(6) to determine total PM emissions.

TABLE

Table 1. Emission Test Results, Boiler 33, Methods 5 and OTM-28
Allegheny Energy Supply Company, LLC, Mitchell Power Station, New Eagle, Pennsylvania

Test Data		Run 1	Run 2	Run 3	Average
Date		6/29/09	6/29/09	6/29/09	
Start Time		3:45 PM	5:20 PM	6:55 PM	
End Time		4:59 PM	6:32 PM	8:05 PM	
Flow Rate	(ACFM)	819,840	843,898	854,159	839,299
Flow Rate	(SCFM)	714,419	735,806	744,359	731,528
Flow Rate	(DSCFM)	631,733	650,671	655,142	645,849
Sample Volume	(DSCF)	52.372	54.978	55.756	54.37
Carbon Dioxide (CO ₂)	(dry volume %)	11.27	11.37	11.47	11.37
Oxygen (O ₂)	(dry volume %)	7.70	7.60	7.40	7.56
Water Vapor (H ₂ O)	(volume %)	11.57%	11.57%	11.99%	11.71%
Stack Temperature	(°F)	120.0	119.7	120.0	119.9
Percent of Isokinetic Sampling	(%)	99.0	100.9	101.6	100.5
Boiler Operation					
Boiler Load	(MW)	253.0	255.5	256.0	254.8
Standard F _c	(scf/MMBtu)	1,750	1,777	1,780	1,769
Standard F _d	(DSCF/MMBtu)	9,635	9,763	9,789	9,729
Higher Heating Value	(BTU/lb, dry basis)	13,019	13,001	13,063	13,028
Heat Input Based on F _d	(MMBtu/hr)	2,485	2,545	2,595	2,542
Results					
Total Particulate (filterable and condensable)					
Mass Collected	(mg)	57.1	62.4	54.4	58.0
Emission Concentration	(gr/DSCF)	0.0168	0.0175	0.0151	0.0165
Emission Rate	(lb/hr)	91.12	97.68	84.58	91.13
Emission Rate based on F _d	(lb/MMBtu)	0.037	0.038	0.033	0.036
Filterable Particulate (Method 5)					
Mass Collected	(mg)	39.8	53.8	32.2	42.0
Emission Concentration	(gr/DSCF)	0.0117	0.0151	0.0089	0.0119
Emission Rate	(lb/hr)	63.57	84.23	50.02	65.94
Emission Rate based on F _d	(lb/MMBtu)	0.026	0.033	0.019	0.026
Condensable Particulate (Method OTM28)					
Inorganic Condensable Mass Collected	(mg)	14.3	6.4	20.3	13.7
Organic Condensable Mass Collected	(mg)	5.0	4.2	3.9	4.4
Total Condensable Mass Collected	(mg)	17.3	8.6	22.2	16.0
Emission Concentration - Inorganic Condensable	(gr/DSCF)	0.0036	0.0012	0.0051	0.0033
Emission Concentration - Organic Condensable	(gr/DSCF)	0.0009	0.0006	0.0005	0.0007
Emission Concentration - Total Condensable	(gr/DSCF)	0.0051	0.0024	0.0062	0.0046
Emission Rate - Total Condensable	(lb/hr)	27.55	13.44	34.56	25.18
Emission Rate based on F _d	(lb/MMBtu)	0.011	0.005	0.013	0.010
ACFM	Actual cubic feet per minute	mg	Milligrams		
lb/MMBtu	Pounds per million British thermal units	MMBtu	Million British thermal units		
DSCF	Dry standard cubic feet	MW	Megawatts		
DSCFM	Dry standard cubic feet per minute	scf	Standard cubic feet		
DSCM	Dry standard cubic meter	SCFM	Standard cubic feet per minute		
°F	Degrees Fahrenheit	%	Percent		
lb/hr	Pounds per hour	gr/DSCF	Grains per dry standard cubic feet		

TV-63-00016

11. Sunoco shall meet the requirements of 40 CFR 60, Subpart GGG (references VV) for fugitives associated with the 433 HFAU. For equipment in organic HAP service, Sunoco shall comply with the requirements for fugitives in 40 CFR 63, Subpart CC (references 40 CFR 60 Subpart VV).

12. In accordance with 25 Pa. Code § 129.55(d), the purging of VOCs during a unit turnaround shall be performed in a manner as to direct the volatile organic vapors to a fuel gas system, flare, or vapor recovery system until the initial pressure in the equipment reaches 19.7 psia.

13. If at any time AMS has cause to believe that air contaminant emissions from the H-1 Heater may be in excess of the limitations specified in Condition 5, Sunoco shall be required to conduct whatever test are deemed necessary by AMS to determine the actual emission rates.

14. The H-1 Heater shall be equipped with NO_x and O₂ continuous emission monitors and recorders at the outlet for compliance determination with the NO_x emission limitation. The continuous monitors must conform to USEPA performance specifications in 25 Pa. Code § 123.31 and the PA DEP Continuous Source Monitoring Manual (PA CSMM). The Phase II performance testing of each continuous monitor shall occur within 60 days after achieving maximum production rate, but no later than 90 days after re-starting the unit.

15. Sunoco shall record the HFAU production rate daily and on a 365-day rolling average, calculated daily.

16. Sunoco shall record the H-1 Heater operating rate in mmBtu/hr hourly and on a 24-hour average, calculated hourly.

17. Sunoco shall calculate and record the fuel oil usage for the No. 3 Boiler House monthly for a rolling 12-month period.

18. Sunoco shall submit CEM and production reports to Air Management Services on a quarterly basis. CEM reports must meet the requirements of the PA CSMM.

19. Any notifications required, as a result of any condition herein should be directed to Chief of Source Registration, Air Management Services, 321 University Avenue, Philadelphia, PA 19104.

AMS 06146: Geppert Brothers, Inc. (2651 Southampton Road, Philadelphia, PA 19116) for installation of a Portable Eagle Concrete crusher with a 500 hp diesel engine in the City of Philadelphia, **Philadelphia County**. There will be a potential emission increase of 3.38 tons for NO_x and 0.06 ton for PM for the facility. The plan approval will contain operating and recordkeeping requirements to ensure operation within all applicable requirements.

OPERATING PERMITS

Intent to Issue Title V Operating Permits under the Air Pollution Control Act (35 P. S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter G.

Southwest Region: Air Quality Program, 400 Waterfront Drive, Pittsburgh, PA 15222-4745, Mark Wayner, Facilities Permitting Chief, (412) 442-4174.

63-00016-00010-Allegheny Energy (800 Cabin Hill Drive, Greensburg, PA 15601) for Mitchell Power Station in the municipality of Monongahela, **Washington County**. This is a Title V Operating Permit Renewal.

Intent to Issue Operating Permits under the Air Pollution Control Act (35 P. S. §§ 4001—4015) and 25 Pa. Code Chapter 127, Subchapter F.

Southeast Region: Air Quality Program, 2 East Main Street, Norristown, PA 19428, Edward Jurdones Brown, Facilities Permitting Chief, (484) 250-5920.

46-00040: National Label Co., Inc. (2025 Joshua Road, Lafayette Hill, PA 19444) for operation of a printing facility in Whitemarsh Township, **Montgomery County**. The renewal permit is for a non-Title V (State-only) facility. Sources of air emissions include 11 printing presses, 1 thermal oxidizer and various support sources. The permit will include monitoring, recordkeeping and reporting requirements designed to keep the facility operating within all applicable air quality requirements. The facility was originally permitted under TVOP-46-00040, issued in November 2001. Since that time, the facility has begun to use more UV coatings and less solvent-based coating significantly reducing their air emissions.

Southcentral Region: Air Quality Program, 909 Elmerton Avenue, Harrisburg, PA 17110, Ronald Davis, New Source Review Chief, (717) 705-4702.

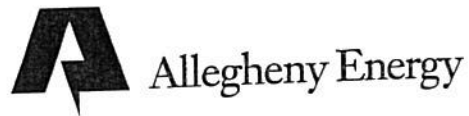
06-03130: Custom Design and Manufacturing Co., Inc. (420 South Third Street, Hamburg, PA 19526) for operation of a wooden cabinet coating operation known as Quaker Maid Cabinetry in the Hamburg Borough, **Berks County**. Emissions will be controlled by dry filters. The facility is not subject to Title V (State-only operating permit). The permit will include monitoring, recordkeeping, work practices and reporting requirements designed to keep the facility operating within all applicable air quality requirements.

COAL AND NONCOAL MINING ACTIVITY APPLICATIONS

Applications under the Surface Mining Conservation and Reclamation Act (52 P. S. §§ 1396.1—1396.19a); the Noncoal Surface Mining Conservation and Reclamation Act (52 P. S. §§ 3301—3326); The Clean Streams Law (35 P. S. §§ 691.1—691.1001); the Coal Refuse Disposal Control Act (52 P. S. §§ 30.51—30.66); and The Bituminous Mine Subsidence and Land Conservation Act (52 P. S. §§ 1406.1—1406.21). Mining activity permits issued in response to applications will also address the applicable permitting requirements of the following statutes: the Air Pollution Control Act (35 P. S. §§ 4001—4015); the Dam Safety and Encroachments Act (32 P. S. §§ 693.1—693.27); and the Solid Waste Management Act (35 P. S. §§ 6018.101—6018.1003).

The following permit applications to conduct mining activities have been received by the Department of Environmental Protection (Department). A copy of an application is available for inspection at the district mining office indicated before an application. Where a 401 Water Quality Certification is needed for any aspect of a particular proposed mining activity, the submittal of the permit application will serve as the request for certification.

Written comments, objections or requests for informal conferences on applications may be submitted by any person or any officer or head of any Federal, State or local government agency or authority to the Department at the district mining office indicated before an application within 30 days of this publication, or within 30 days after the last publication of the applicant's newspaper advertisement, as provided by 25 Pa. Code §§ 77.121—77.123 and 86.31—86.34.



Environment, Health & Safety

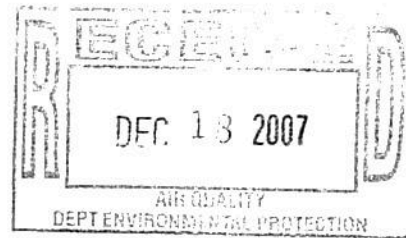
800 Cabin Hill Drive
Greensburg, PA 15601

CERTIFIED MAIL

December 17, 2007

Ms. Sharene Shealey
PA Department of Environmental Protection
Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222

RE: Allegheny Energy Supply Company, LLC
Mitchell Power Station
Proof of Publication - Title V Renewal



Dear Ms. Shealey:

As per your guidance, enclosed please find the original Proof of Publication for the Mitchell Power Station's Title V Operating Permit renewal notice, which appeared in the *Herald-Standard* on December 10, 11 and 12, 2007.

Thank you for your time and attention to this matter. If you have any questions or need additional information at this time, please feel free to contact me at (724) 838-6136 or via e-mail at jlefik@alleghenyenergy.com.

Sincerely,

A handwritten signature in cursive script, reading 'James A. Lefik'.

James A. Lefik
Environmental Engineer

Enclosure

Proof of Publication

The HERALD-STANDARD, established in 1907, a newspaper of general circulation, published by Uniontown Newspapers, Inc., a Pennsylvania corporation, 8-18 East Church Street, Uniontown, Fayette County, Pennsylvania, and has been issued regularly, except legal holidays, since said date.

The attached advertisement, which is exactly as printed and published, was published in the regular issues of said newspaper, on December 10, 11, 12 2007

The costs of advertising and proof, 956.10

NOTICE
OF INTENT TO ISSUE
Title V Operating Permit
Renewal
Best Available Retrofit
Technology
Determination
Permit No. TV-63-00016
Allegheny Energy, Inc.
800 Cabin Hill Drive
Greensburg, PA
15601-1650

The Department of Environmental Protection (DEP) intends to issue a renewal Title V Operating Permit that includes a Best Available Retrofit Technology determination to Allegheny Energy, Inc. for its Mitchell Power Station. The Mitchell Station is located in Monongahela, Washington County.

The Mitchell Station is a major facility subject to the operating permit requirements under Title V of the Federal Clean Air Act and 25 PA Code Chapter 127, Subchapters F (relating to operating permit requirements) and G (relating to Title V).

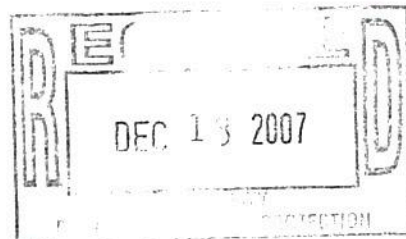
jections concerning the proposed Title V permit to Mark Wayner, Regional Air Quality Program Manager, Department of Environmental Protection, Southwest Regional, 400 Waterfront Drive, Pittsburgh 15222 within 30 days of publication of this notice. Written comments submitted to the Department during the 30-day public comment period shall include the name, address and telephone number of the persons(s) submitting the comments, along with the reference number of the proposed permit (specify Permit #TV 63-00016). The commentator should also include a concise statement regarding the relevancy of the information in the proposed permit of objections to issuance of the permit.

The Department reserves the right to hold a public hearing on the proposed action based upon the information received during the public comment period and will provide notice of any scheduled public hearing at least thirty days in advance of the hearing. The hearing notice will be published in the Pennsylvania Bulletin and a newspaper of general circulation where the facility is located.

UNIONTOWN NEWSPAPER, INC.

By Vuk Lee Reese

OF PENNSYLVANIA,
TY OF FAYETTE, } SS:



me, a Notary Public in and for the said county and state, personally and Max Phillip Sperry, who being duly sworn according to law says that controller of Uniontown Newspapers, Inc.; that neither affiant nor said tion is interested in the subject matter of the attached advertisement; and of the allegations of the foregoing statement including those as to the ace and character of publication are true.

and subscribed before me

December 12, 2007
Vuk Lee Reese

Max Phillip Sperry



COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Southwest Regional Office
September 1, 2009

SUBJECT: Comments and Response Document
Title V Operating Permit
Allegheny Energy Supply Co., LLC
Mitchell Power Station
Monongahela Township
Washington County

TO: Air Quality Permit File: #63-00016

THROUGH: Barbara Hatch, P.E. *BH*
Facilities Permitting Chief
Air Quality

FROM: Martin L. Hochhauser, P.E. *M. L. H., P.E.*
Facilities Permitting Section
Air Quality

The Department published Notice of Intent to Issue a Title V Operating Permit (TVOP) to Allegheny Energy Supply Co. (AES) for the Mitchell Power Station from the United States Environmental Protection Agency (US EPA) in the Pa. Bulletin on December 8, 2007. It solicited comments regarding the permit renewal in this posting. Two sets of comments, from both AES and the United States Environmental Protection Agency (USEPA) were received as a result of this posting. These comments and responses to them are shown below.

In addition, certain laws, regulations and policies of both the Commonwealth of Pa. and the United States have been changed since the public posting. Changes to the draft permit due to this are also noted.

Commentator #1

Paul T. Wentworth, P.E.
Senior Environmental Engineer
USEPA

Response

This change was made to the draft permit.

Comment C. A request was made to remove particulate testing requirements for the coal fired EGU since particulate testing has been conducted on this source during June 2009 at the request of the Department. This should fulfill the requirement for particulate emission testing, once during the term of the permit. Changes to the draft TVOP to reflect changes in Department policy are discussed below.

Response

It is now the policy of the Department that both filterable and condensable particulate emission tests be conducted on all coal fired EGUs, every two years. The June 2009 testing will serve as the initial test, starting a two-year period.

Comment D. If a requirement for particulate testing is added for the oil fired EGUs, testing should only be for filterable particulate using EPA Test Method 5. Condensable particulate emissions should not be tested.

Response

PM₁₀ and PM_{2.5} are comprised of both their filterable and condensable fractions. Since condensable particulate is a gas or vapor at the temperature of the sampling filter, all of it consists of PM_{2.5}. According to AES, the major cost of emission testing these units is for fuel oil to operate them during the sampling period. These operating periods provide a period when condensable particulate emission testing can be conducted for the additional cost of the sampling only.

The importance of PM_{2.5} particulate emission testing to develop accurate maximum emission rates from these sources is discussed in the Response to Comment A. of Commentator #1.

Comment E. For conditions related to the NO_x budget, the word “limitations” should be replaced with “allowances held in the compliance account.” There are 11 instances of the word in these conditions.

Response

This change was made to the draft permit.

056, 061, 064 also be removed. Inclusion of these conditions unnecessarily complicates the Title V Permit and annual Compliance Certifications.

9. Page 72: Condition #038 - Change the NO_x Account Representatives as follows:

NO_x Authorized Account Representative

David C. Cannon, Jr.
Vice President
Allegheny Energy, Inc.
Environment, Health and Safety
800 Cabin Hill Drive
Greensburg, PA 15601
Phone: (724) 838-6709
Fax: (724) 830-5165
E-mail: dcannon@alleghenyenergy.com

Alternative:

Randy D. Cain
Environmental Affairs Manager
Allegheny Energy, Inc.
800 Cabin Hill Drive
Greensburg, PA 15601
Phone: (724) 838-6004
Fax: (724) 830-5165
E-mail: rcain@alleghenyenergy.com

applicable requirements of 40 CFR Parts 52, 60, 63, 64, 68, 72, 73, 74, 75, 76, 96, 97, 98 and 25 Pa. Code Chapters 121–145.

DEP also intends to issue an Acid Rain Permit for this site. The Title IV Permit is included by reference in the Title V Operating Permit renewal. The oil-fired EGUs at this facility are not subject to Acid Rain permitting for NO_x. The coal-fired unit is subject to a Phase II NO_x Averaging Plan. During the Department's review, SO₂ allowances were obtained from EPA's Acid Rain Program Database as follows:

Calendar Year	2012	2013	2014	2015	2016
Unit 1	0	0	0	0	0
Unit 2	1	1	1	1	1
Unit 3	0	0	0	0	0
Unit 33	3,103	3,103	3,103	3,103	3,103

Copies of the application, DEP's analysis and other documents used in the evaluation of the application are available for public inspection during normal business hours at DEP, 400 Waterfront Drive, Pittsburgh, PA 15222. Appointments for scheduling a file review may be made by calling 412-442-4286. Any person wishing to provide DEP with additional information that they believe should be considered prior to the issuance of this permit may submit the information to DEP at the address shown above. A 30-day comment period, from the date of this publication, will exist for the submission of comments. Each written comment must contain the name, address and telephone number of the person submitting the comments, identification of the proposed permit (specify TVOP-63-00016) and a concise statements regarding the relevancy of the information in the proposed permit or objections to issuance of the permit.

A public hearing may be held, if DEP, in its discretion, decides that such a hearing is warranted based on the information received. All persons submitting comments or requesting a hearing will be notified of the decision to hold a hearing by publication in the newspaper or by the *Pennsylvania Bulletin*, or by telephone, where DEP determines such notification by telephone is sufficient. Written comments or requests for a public hearing should be directed to Barbara Hatch, Air Quality Environmental Engineer Manager, DEP, Southwest Regional Office, 400 Waterfront Drive, Pittsburgh, PA 15222, (412) 442-5226.

TVOP-04-00235 FirstEnergy LLC—Bruce Mansfield Generating Station (128 Ferry Hill Rd., Shippingport, PA 15077) In accordance with 25 Pa. Code §§ 127.424, 127.425 and 127.521, the Department of Environmental Protection (DEP) is providing notice that it intends to issue a renewal Title V Operating Permit (TVOP-04-00235) to FirstEnergy to authorize the operation of the Bruce Mansfield facility located in Shippingport, **Beaver County**.

The facility's main sources include three 914 megawatt pulverized coal-fired electric generating units, four boilers, two diesel generators, material storage and handling equipment, space heaters and other smaller sources. Units #1 and #2 are equipped with a wet venturi scrubber for SO₂ and particulate control, low-NO_x burners, separate over-fired air and selective catalytic reduction (SCR) for NO_x control, and a sodium bisulfite injection system (SBS) for SO₂/opacity control. Unit #3 is equipped with an electrostatic precipitator (ESP) followed by a horizontal weir scrubber for particulate and SO₂ control. Unit #3 is also controlled with SCR, low-NO_x burners, separate over-fired air, and the SBS system. Other sources at this

facility include three auxiliary boilers, two diesel generators, material handling and storage equipment, and other smaller sources.

This facility has the potential to emit the following type and quantity of air contaminants (on an annual basis): 2,356 tons of carbon monoxide, 49,452 tons of nitrogen oxides, 62,519 tons of sulfur oxides, 10,452 tons of particulate matter, 3.0 tons of volatile organic compounds, 42 tons of ammonia, 5,766 tons of hazardous air pollutants, including 5,115 tons of hydrochloric acid, 639.3 tons of hydrofluoric acid, 1.79 tons of lead, and 707 pounds of mercury, and 21,534,178.5 tons of carbon dioxide equivalents (greenhouse gases). No emission or equipment changes are being proposed by this action. The emission restriction, testing, monitoring, recordkeeping, reporting and work practice conditions of the TVOP have been derived from the applicable requirements of 40 CFR Parts 52, 60, 63, 64, 68, 72, 73, 74, 75, 76, 96, 97, 98 and 25 Pa. Code Chapters 121–145.

DEP also intends to issue an Acid Rain Permit for this site. The Title IV Permit is included by reference in the Title V Operating Permit renewal. The EGUs at this facility comply with a Phase II NO_x Averaging Plan. During the Department's review, SO₂ allowances were obtained from EPA's Acid Rain Program Database as follows:

Calendar Year	2012	2013	2014	2015	2016
Unit 1	12,740	12,740	12,740	12,740	12,740
Unit 2	14,094	14,094	14,094	14,094	14,094
Unit 3	14,498	14,498	14,498	14,498	14,498

Copies of the application, DEP's analysis and other documents used in the evaluation of the application are available for public inspection during normal business hours at DEP, 400 Waterfront Drive, Pittsburgh, PA 15222. Appointments for scheduling a file review may be made by calling 412-442-4286. Any person wishing to provide DEP with additional information that they believe should be considered prior to the issuance of this permit may submit the information to DEP at the address shown above. A 30-day comment period, from the date of this publication, will exist for the submission of comments. Each written comment must contain the name, address and telephone number of the person submitting the comments, identification of the proposed permit (specify TVOP-04-00235) and a concise statements regarding the relevancy of the information in the proposed permit or objections to issuance of the permit.

A public hearing may be held, if DEP, in its discretion, decides that such a hearing is warranted based on the information received. All persons submitting comments or requesting a hearing will be notified of the decision to hold a hearing by publication in the newspaper or by the *Pennsylvania Bulletin*, or by telephone, where DEP determines such notification by telephone is sufficient. Written comments or requests for a public hearing should be directed to Barbara Hatch, Air Quality Environmental Engineer Manager, DEP, Southwest Regional Office, 400 Waterfront Drive, Pittsburgh, PA 15222, (412) 442-5226.

TVOP-32-00055: EME Homer City Generation, LP (1750 Power Plant Road, Homer City PA 15748) In accordance with 25 Pa. Code Title V Operating Permit to Homer City Generating Station to authorize the continued operation of the facility located in Black Lick/Center Towns §§ 127.424, 127.425 and 127.521, the Department of Environmental Protection (DEP) is providing notice that it intends to issue a renewal hip, **Indiana County**.

